

Aura ST Meeting

- ACMAP Status
 - ROSES 05, 06, 07
 - Program Review
- Aura MO&DA (Operations and Science Team) Funding Status

Future AC missions – where do we go next?





NAS Decadal Survey

	NASA	Portio	n			
Decadal	INAOA		1 1			
Survey Mission	Mission Description	Orbit	Instruments	Rough Cost Estimate		
Timeframe 2010 – 2013, Missions listed by cost						
CLARREO (NASA portion)	Solar radiation: spectrally resolved forcing and response of the climate system	LEO, Precessing	Absolute, spectrally-resolved interferometer	\$200 M		
SMAP	Soil moisture and freeze/thaw for weather and water cycle processes	LEO, SSO	L-band radar L-band radiometer	\$300 M		
ICESat-II	Ice sheet height changes for climate change diagnosis	LEO, Non- SSO	Laser altimeter	\$300 M		
DESDynI	Surface and ice sheet deformation for understanding natural hazards and climate; vegetation structure for ecosystem health	LEO, SSO	L-band InSAR Laser altimeter	\$700 M		
Timeframe: 2013 – 2016, Missions listed by cost						
HyspIRI	Land surface composition for agriculture and mineral characterization; vegetation types for ecosystem health	LEO, SSO	Hyperspectral spectrometer	\$300 M		
ASCENDS	${\it Day/night, all-latitude, all-season CO}_2 \ column \\ integrals \ for \ climate \ emissions$	LEO, SSO	Multifrequency laser	\$400 M		
SWO1	Ocean, lake, and river water levels for ocean and inland water dynamics	LEO, SSO	Ka-band wide swath radar C-band radar	\$450 M		
GEO-CAPE	Atmospheric gas columns for air quality forecasts; ocean color for coastal ecosystem health and climate emissions	GEO	High and low spatial resolution hyperspectral imagers	\$550 M		
ACE	Aerosol and cloud profiles for climate and water cycle; ocean color for open ocean biogeochemistry	LEO, SSO	Backscatter lidar Multiangle polarimeter Doppler radar	\$800 M		

 CO_2

GEO Chemistry

Aerosols & Clouds



NAS Decadal Survey

	Timeframe: 2016 -2020, Missions listed by cost					
	LIST	Land surface topography for landslide hazards and water runoff	LEO, SSO	Laser altimeter	\$300 M	
	PATH	High frequency, all-weather temperature and humidity soundings for weather forecasting and ${\rm SST}^a$	GEO	MW array spectrometer	\$450 M	
	GRACE-II	High temporal resolution gravity fields for tracking large-scale water movement	LEO, SSO	Microwave or laser ranging system	\$450 M	
	SCLP	Snow accumulation for fresh water availability	LEO, SSO	Ku and X-band radars K and Ka-band radiometers	\$500 M	
	GACM	Ozone and related gases for intercontinental air quality and stratospheric ozone layer prediction	LEO, SSO	UV spectrometer IR spectrometer Microwave limb sounder	\$600 M	
	3D-Winds (Demo)	Tropospheric winds for weather forecasting and pollution transport	LEO, SSO	Doppler lidar	\$650 M	

LEO Chemistry